REMARKS

Claims 16-31 remain pending in this application. New claim 31 was added in this amendment. No new matter was introduced as a result of the amendment.

Claims 16-30 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Haskell.* (US Patent No. 6,233,356) in view of *Bannon et al.*. (US Patent No. 6,272,253). The Applicants respectfully traverse the rejections. Favorable reconsideration is respectfully requested.

The cited art, alone or in combination, does not disclose not teach all the elements in the present invention. Specifically, neither *Haskell* nor *Bannon* disclose "segmenting the picture into at least a first picture object and a second picture object, at least one picture block being assigned to at least a part of an edge of the first picture object . . . coding the picture objects with different quality; assigning a quality specification indicating the quality with which a picture object is coded to at least one macroblock contained in the corresponding picture object; and determining the quality by a spatial resolution" as recited in claim 16 and similarly recited in claim 26 and 31.

As argued previously, *Haskell* teaches the use of "video object layers" to simultaneously provide different image qualities for a video objects (col. 3 lines 18-21). A first level of image quality is obtained by using a base layer (col. 3 lines 18-21). By using only the base layer, all video objects result in a first level of quality. *Haskell* also teaches an improved level of quality for VOPs by using an enhancement layer (col. 3 lines 21-25), which is nothing more than the original video object, encoded at successively higher quality levels (col. 4, lines 32-43). The teaching in *Haskell* has nothing to do with segmenting a picture, where picture blocks are assigned to an edge of a picture object. To the contrary, *Haskell* relies on frame rates (which is a component of video quality) to delineate between different "enhancement" levels (col. 5, lines 51-67). By using MUX/DEMUX configurations, *Haskell* teaches a single video data stream that may provide different quality levels of video, depending on the processing power of the receiver that is obtaining the video (col. 3, lines 28-31; col. 6, lines 60-64). This configuration is materially different from the features claimed above.

The above arguments specifically address the features of the present claims. Haskell does not disclose segmenting a picture into a picture objects – Haskell clearly teaches that the video objects are each to be considered as image data that collectively form a video sequence,

where the image data may remain in a video sequence among many frames (col. 1, lines 52 to col. 2, line 2). The different video objects are then encoded using different coding techniques to improve video efficiencies when a composite of the video objects is displayed (col. 2, lines 3-11; col. 4, lines 64-67). The segmenter/formatter 400, referenced in the office action, merely describes how video objects are segmented from the overall video data, where each video object appears on any given frame as a video object plane (VOP) (col. 4, lines 20-38; col. 1, line 52 to col. 2, line 2). The enhancement layers, simply provide a means for re-coding the same video object at a higher quality (col. 3, lines 18-31). To analogize, Haskell teaches segmenting a plurality of pictures (video) into respective picture objects (video objects), where each picture object is treated as a distinct picture in and of itself. Each of the picture objects can then be recoded at higher levels (VOP) to accommodate different processing capabilities (col. 5, lines 15-38). This configuration is materially different from the one being presently claimed.

Also, *Bannon* teaches a configuration where a rectangle is found for each connected region (FIGs. 5a-d). The region is then tilted with 16 by 16 macroblocks at any pixel coordinate (col. 8 lines 20-41). Thus, if there are two non connected regions, such as in FIG. 5a, this results in two connected regions and therefore in two separate objects. However the present invention overcomes this inflexibility by just mandating that one picture block is assigned to at least a part of an edge of the first picture block. This is much more flexible than the configuration in *Bannon*. In addition the present invention provides better compression rates, because of sending coding information for two connected regions, the present invention requires only one coding information for the picture object.

Finally, the Applicant maintains that there is no teaching or suggestion to combine the *Haskell* reference with the *Bannon* reference. Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills* 916 F.2d at 682, 16 USPQ2d at 1432 (MPEP 2143.01). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (MPEP 2143).

Again, *Haskell* teaches the use of video object planes (VOPs) to capture video objects and video object layers to create composite images (see col. 4, lines 20-37, 64-67). There is

nothing in the disclosure of *Haskell* that remotely suggests the use of edge detection, as *Haskell* relies on frame rates to improve video quality (see above). On the other hand, *Bannon* teaches compression schemes to create transmissions of video that are bandwidth efficient (col. 2, lines 43-59; col. 3, lines 55-62), and does not rely in any way on VOP's as taught in *Haskell*. Applicant does not dispute that *Haskell* and *Bannon* are analogous art. However, merely being analogous does not provide a *prima facie* reason for combining references. Motivation must be found to combine references and no motivation is found to combine *Bannon* with a modified *Haskell* in order to find the present invention obvious.

For at least these reasons, the Applicants submit that the rejection under 35 U.S.C. §103 is improper and should be withdrawn. An early Notice of Allowance is earnestly requested.

If any fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket number (112740-446) on the account statement.

Respectfully submitted,

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